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REMARKS

Claims 1-23 were pending in the present Application. Claims 13-16 are withdrawn as a result of an earlier restriction requirement, Claims 1, 17 are amended, Claims 24 and 25 are newly added, and Claims 3, 5-6, and 20-21 are canceled, leaving Claims 1-2, 4, 7-12, 17-19, and 22-25 for consideration in the present amendment.

No new matter has been entered by way of amendment. For example, support for the amendments to Claims 1 and 17 can be found in the canceled claims. Support for the newly added claims 24 and 25 can be found at least in paragraphs [0026]-[0033].

Reconsideration and allowance of the claims is respectfully requested in view of the following remarks.

Affirmation of Restriction Requirement

Applicants affirm election of Group I, Claims 1-12 and 17-23 drawn to a process for producing halogen oxides.

Claim Rejection Under 35 U.S.C. §102(c)

Claims 1, 3, and 8 stand rejected under 35 U.S.C. § 102(c), as allegedly anticipated by U.S. Patent Application Publication No. 2003/0064018 to Sampson et al. (hereinafter "Sampson"). Applicants respectfully traverse this rejection.

The rejection has been rendered moot in view of the foregoing amendments. Applicant has carefully studied Sampson and can find no disclosure of Applicant's claimed feature wherein the cation exchange material has a crosslinking density greater than or equal to about 16%.

In view of the foregoing, it is respectfully requested that the rejection to Claims 1, 3, and 8 be withdrawn.

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Claim Rejections Under 35 U.S.C. §103(a)

Claims 1-12 and 13-16 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sampson. Applicants respectfully traverse this rejection.

Before addressing the rejection in detail, it is noted that the rejection applies to Claims 13-16, which have been affirmed as being withdrawn. Also, there were no rejections/objections applied to Claims 17-23. Applicant's undersigned representative is unclear as to whether these claims stand allowed or should have been included in the present 103 rejection. It is kindly requested that the Examiner clarify his position and address Claims 17-23 in the next Office Action or Notice of Allowance.

Turning now to the present rejection, it is noted that independent Claim 1 is directed to a process comprising feeding a dilute aqueous alkali metal halite solution into a cation exchange column, wherein the cation exchange column contains a cation exchange material, wherein the cation exchange material has a crosslinking density greater than or equal to about 16%; contacting the dilute aqueous alkali metal halite solution with the cation exchange material to produce an effluent containing halous acid; and feeding the effluent containing halous acid into a catalytic reactor containing a catalytic material, wherein the alkali metal halite solution consists essentially of an alkali metal chlorite solution to produce an effluent containing chlorous acid from the cation exchange column, and chlorine dioxide upon contact with the catalytic material.

Sampson is generally directed to methods for making chlorous acid and chlorine dioxide.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Sampson fails to establish a prima facie case of obviousness because Sampson fails to

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teach or suggest a process comprising, *inter alia*, feeding a dilute aqueous alkali metal halite solution into an cation exchange column, wherein the cation exchange column contains a cation exchange material, wherein the cation exchange material has a crosslinking density greater than or equal to about 16%. As noted in Applicant's paragraph [0024], increasing the crosslinking density was discovered by the Applicant to increase the resistance of the cation exchange material to, among others, oxidation and degradation. It was only after extensive experimentation that this was discovered. Many factors contribute to operating lifetimes for the cation exchange material. Increasing the cross linking density has not been taught or suggested prior to Applicant's discovery.

Moreover, neither Sampson nor the chlorine dioxide art as a whole provide a reason for one of ordinary skill in the art to modify Sampson in the manner required to meet independent Claim 1. *In re Luskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989) ("Although the Commissioner suggests that [the structure in the primary art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification'" (citation omitted); *In re Stencel*, 828 F.2d 751, 755, 4 U.S.P.Q.2d 1071, 1073 (Fed. Cir. 1987) (obviousness cannot be established "by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion that the combination be made").

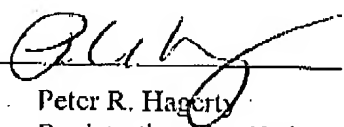
In view of the foregoing, the rejection applied to Claim 1 is requested to be withdrawn. Given that Claims 2-12 variably depend from Claim 1, they too are patentable for at least the same reasons.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

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If there are any additional charges with respect to this Amendment or otherwise,
please charge them to Deposit Account No. 06-1130 maintained by Applicant's attorneys.

Respectfully submitted,
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